

Tutorato 8 - AM1b
Martedì 27 Aprile 2004
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Calcolare la derivata delle seguenti funzioni:

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|---|--|
| 1. $\frac{x^2 - 1}{x(x + 2)}$ | 2. $\frac{3x^5 - 2x^3 + 5}{x^4 - 3x^2 + 3x}$ |
| 3. $x^2 - 3x + 2$ | 4. $\sqrt[3]{1 - 3x} - x$ |
| 5. $x^2 \sin x$ | 6. $e^x \cos x$ |
| 7. $\sin(x^2)$ | 8. $x^3 - \sin^2 x$ |
| 9. $\frac{x}{\ln x}$ | 10. $\ln(\sin x)$ |
| 11. $\sqrt{1 + x} - \sqrt{x}$ | 12. $\ln(x + x^2)$ |
| 13. $\frac{1}{\sqrt{1 - x}}$ | 14. xe^x |
| 15. $\sin(x^{2e-x})$ | 16. $\sin(\arccos(x))$ |
| 17. $\frac{\sin(e^x)}{\ln(x - \tan(x^2))}$ | 18. $\frac{1}{\ln x}$ |
| 19. $\sin x \arccos x$ | 20. $\left(\frac{1}{x}\right)^{\sin x}$ |
| 21. $\ln(2x)$ | 22. $\sqrt{1 + x^3}$ |
| 23. $\arcsin(x - \sin x)$ | 24. $\ln(x + \sqrt{1 + x^2})$ |
| 25. $2x\sqrt{1 + x^2}$ | 26. $\arctan(2x - x^2)$ |
| 27. $(x + \arctan x)^x$ | 28. $x^4 - 4^x$ |
| 29. $2^{x \sin x}$ | 30. $\sqrt{\frac{\sin x - x}{\cos x}}$ |
| 31. $\frac{x + \sqrt{2} + x^2}{x - \sqrt{2} + x^2}$ | 32. x^x |